DEPOS
421-A
p85-1045

Project: SAVE ENERGY!

AF PAMPHLET 18-2
26 August 1982

Energy Conservation

EFFICIENCY IN ALL OPERATIONS

Air Force Energy Office
HQ USAF/LEYSF

NEW YORK STATE LIBRARY

NOV 25 1985

GOVERNMENT DOCUMENTS

No. of Printed Pages: 4
OPR: HQ USAF/LEYSF (Maj B. Lenz)
Distribution: F

best copy available

Energy conservation in the Air Force involves everyone. The theme for energy awareness is "Efficiency in All Operations." This theme was developed to highlight several main ideas:

o Recognition that energy conservation applies to all areas of mission performance.

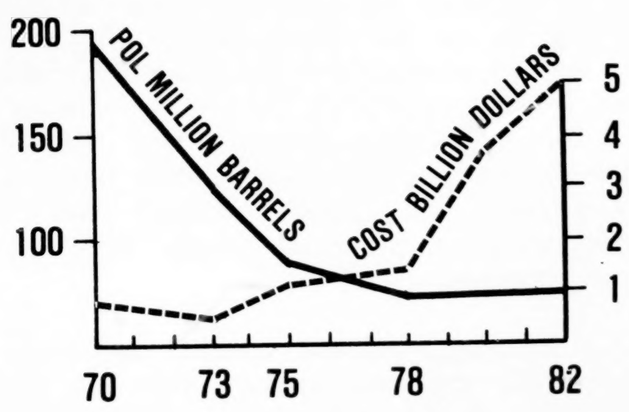
o Mission requirements must be completed as efficiently as possible to reduce energy consumption.

o Air Force personnel should support energy conservation efforts both on the job and in their personal activities.

Maximizing energy conservation while maintaining force readiness is one of the most significant peacetime management challenges the Air Force has ever faced. As a consequence of the 1973 and 1978 fuel shortages, it became clear that two vital but competing national interests had to be served: resource conservation and national security. During the shortages, large and immediate energy savings were urgently needed. The Air Force took extraordinary action to conserve energy in the areas of aircraft, vehicles and facilities operations.

Air Force fuel consumption should be put into perspective. The Department of Defense uses about two percent of the nation's energy consumption with 48 percent of this amount going to the Air Force. Air Force energy consumption is 121 million barrels a year or about 333,000 barrels a day. Since 1973 energy consumption has been reduced 35 percent overall while costs have increased to over $5 Billion. The significant amount of public interest attracted to Air Force energy consumption and the high cost of energy serve as reminders to continue energy conservation techniques.

Aircraft fuels comprise the largest energy area at 70 percent with the most potential for energy savings. Both flying hours and fuel use have been significantly reduced since the early 1970's while costs have increased.



A growth of flying hours is required to respond to mission requirements and readiness. With the high cost of energy continued efforts will be required to meet mission requirements as efficiently as possible. Some proven techniques to reduce fuel consumption are:

o Optimizing fuel loads.

o Reduced engine warm-up times.

o Fuel savings advisory systems.

o Optimized flight plans.

o Use of minimum energy descents.

Facility operations is the next largest energy area in the Air Force and involves 28 percent of total consumption. The overall energy consumption is measured against the total square footage of Air Force facilities and has been reduced 14 percent since FY 1975. This has been a result of several initiatives:

o Conversions to more energy efficient equipment and facilities.

o Improved insulation and windows.

o Alteration of lighting systems and levels.

o Installation of energy monitoring and control systems to reduce energy consumption.

best copy available

In many cases these efforts increased the quality of life of people working and living on an Air Force base. Improvements to energy systems are continually being programmed in the Energy Conservation Investment Program and through the Operations and Maintenance budgets. Awareness of facility energy use is necessary to minimize energy costs and consumption.

Although vehicle operations constitute the smallest energy area at two percent, it is a critical and highly visible area of Air Force energy consumption. Vehicle fuel consumption has the largest percent reduction from FY 75 at 29 percent. An aggressive approach has been used to reduce vehicle fuel consumption:

o Procure more efficient vehicles.

o Convert to more efficient diesel vehicles.

o Reduce vehicle speeds.

o Reduce vehicle use where possible.

Continued reduction in vehicle fuel consumption is expected as the vehicle fleet becomes more efficient. Energy awareness and proper vehicle operation are key items that must be continued in this area.

The Air Force objective is to use the least amount of energy it needs to achieve the mission and maintain force readiness. The Air Force is working hard to conserve energy.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

CHARLES A. GABRIEL
General, USAF
Chief of Staff

JAMES L. WYATT, JR., Colonel, USAF
Director of Administration